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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,602	09/15/2003	Chang-Ning Huang	M61.12-0514	2369

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EXAMINER

SAINT CYR, LEONARD

ART UNIT	PAPER NUMBER
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2626

MAIL DATE	DELIVERY MODE
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01/31/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/662,602	Applicant(s) HUANG ET AL.	
	Examiner Leonard Saint-Cyr	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27 - 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/11/08 has been entered.

Response to Arguments

2. Applicant's arguments filed 01/18/08 have been fully considered but they are not persuasive.

Applicant argues that Wu does discuss that evaluation based on a particular word type or providing effectiveness indication for particular word types (Amendment, pages 5 – 7).

The examiner disagrees, Wu teaches that most common types of named entities and factoids whose segmentation may vary across different standards (page 12, paragraph 2.5). Varying segmentation for different types of names entities and factoids implies evaluating based on a particular word type, since name entities and factoids are two different word types.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 27 - 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Wu (Customizable Segmentation of Morphologically Derived Words in Chinese; February 2003).

As per claim 27, Wu teaches a method for evaluating a word segmentation language model, comprising:

building the word segmentation language model based on an annotated corpus; applying the language model to a test corpus of unsegmented text different from the annotated corpus to provide an output indicative of words in the test corpus, and a word type indication for each word ("most common types of named entities and factoids whose segmentation may vary across different standards"), the word type indication being one of a plurality of word type indications ("a language model is used to select the best sequence of characters"; page 2, paragraph 2, lines 9 – 11; page 9, paragraph 4, lines 6, and 7; page 12, sections 2.5);

comparing the word type indication for each word in the output of the language model with predefined word type indications of words of the test corpus; and evaluating the language model based on the comparison of the word type indication for each word in the output and the predefined word type indication to provide an indication of effectiveness of the language model as function of the word type indications identified by the language ("segmented consistently as long as their internal structures are available"; page 3, lines 31 – 36; page 11, lines 23 – 25; page 12, sections 2.5; page 14, lines 7 – 10).

As per claim 28, Wu further discloses identifying words in the output that match words in the predefined type indication ("select the correct character sequence"; page 11, lines 23 – 25).

As per claims 29, and 30, Wu further discloses comparing person names, locations, organization names, overlapping ambiguous strings and covering ambiguous strings in the output and the predefined word type indications (page 12, paragraphs 2.5 – 2.5.2).

As per claim 31, Wu teaches a method of evaluating word segmentation models, comprising:

using a first word segmentation model to segment a corpus of text into words and tags to the words indicative of one of the plurality of word types ("most common types of

Art Unit: 2626

named entities and factoids whose segmentation may vary across different standards"), the words and tags forming a first output ("first segmented the text using our default setting"; page 19, paragraph 2, lines 1, and 2; page 12, sections 2.5);

using a second word segmentation model to segment a corpus of text into words and tags to the words indicative of one of the plurality of word types ("most common types of named entities and factoids whose segmentation may vary across different standards"), the words and tags forming a second output ("adjusted segmentation were evaluated"; page 19, paragraph 2, lines 1 - 4; page 12, sections 2.5);

comparing the first output to a predefined indication of words and tags of the words indicative of one of the plurality of words types from the corpus of text to provide a first set of values for each of the plurality of word types indicative of how the first word segmentation model recognizes each of the plurality of word types; comparing the second output to a predefined indication of words and tags of the words indicative of one of the plurality of words types from the corpus of text to provide a second set of values for each of the plurality of word types indicative of how the second word segmentation model recognizes each of the plurality of word types ("scores when the default setting was used...after a quick adjustment...the scores became"; page 19, paragraph 3);

comparing the first set of values and the second set of values to determine effectiveness of the first word segmentation model and the second word segmentation with respect to each of the plurality of word types ("the scores improved dramatically

across the board in both the CHTB and BU data after the parameter values were adjusted to the relevant standards"; page 20, paragraph 3).

As per claim 32, Wu further discloses that the first set of values is based on matches between the first output and the predefined indication and wherein the second set of values is based on matches between the second output and the predefined indication (page 19; paragraphs 1, and 2).

As per claim 33, Wu further discloses that the plurality of word types includes person names, location names, organization names, overlapping ambiguous strings, and covering ambiguous strings (page 12, paragraphs 2.5 – 2.5.2).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard Saint-Cyr whose telephone number is (571) 272-4247. The examiner can normally be reached on Mon- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 2626

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LS

01/28/08


RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER